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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,187	09/21/2005	Javier Sanchez	W1878.0222	5315

32172 7590 10/20/2008

DICKSTEIN SHAPIRO LLP  
1177 AVENUE OF THE AMERICAS (6TH AVENUE)  
NEW YORK, NY 10036-2714

EXAMINER
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KAO, WEI PO ERIC

ART UNIT	PAPER NUMBER
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2416

MAIL DATE	DELIVERY MODE
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10/20/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/550,187	<b>Applicant(s)</b> SANCHEZ, JAVIER	
	<b>Examiner</b> WEI-PO KAO	<b>Art Unit</b> 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-9,12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-9,12 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claim 1, 3, 4, 6, 7, 8, 9, 12 and 14 have been considered but are moot in view of the new ground(s) of rejection.

In response to the remark on pages 10 and 11 dated April 7, 2008:

In response to the entire content of the remarks, in particular that "Among the limitations of independent claim 1 which are neither disclosed nor suggested in the art of record (the background of the application (admitted prior art) and Leprieur et al, U.S. Publication No. 2003/0003951 (Leprieur)) is the step (c) of "the active radio access module activating the passive radio access module immediately before step (a)." Among the limitations of independent claim 6 which are neither disclosed nor suggested in the art of record is the requirement that "the active radio access module adapted to activate the passive radio access module immediately before measuring the time offset." Among the limitations of independent claim 7 which are neither disclosed nor suggested in the art of record is the requirement that "the active radio access module is adapted to activate the passive radio access via the central interface, and the activation of the passive radio access module is made immediately before calculating the time offset T<sub>offset</sub>," the examiner respectfully argues the following. Indeed, since the cited limitation is newly presented in the Amendment dated July 15, 2008, the previously mailed Office Action

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dated February 1, 2008 was not able to respond to the newly presented limitations. Accordingly, the original claim limitations were the following:

2. (Original) The method according to claim 1, further comprising a step of **activating the passive radio module from the active radio access module.**

5. (Original) The method according to claim 2, wherein the activation of the passive access module is made immediately before the measurements on cells adjacent to the current cell.

Given the broadest reasonable interpretation to the specific limitation, namely “activating the passive radio module from the active radio access module,” such limitation can be understood by one ordinary skill in the art as activating the passive radio module and deactivate the active radio access module. In addition, with the claim 5, one may understand such step of activation happens before the measurement of the time offset  $T_{\text{offset}}$  (see original claim 1). Therefore, as presented in the Office Action dated February 1, 2008, the examiner cited paragraphs [0005] and [0009] of the admitted prior art as the reference for the particular rejection. Also admitted by the Applicant on the page 11 in the remark is that “Paragraphs [0003], [0005] and [0009] of AAPA, which were cited by the Office Action, teach only switching between the active and passive radio access modules.” In particular, paragraphs [0005] and [0009] of the admitted prior art teach that a Type 2 terminal is able to activate one of the GSM and UMTS modules and deactivate the other module when the terminal is switching from one cell/network with either GSM or UMTS access technique to another cell/network with the other different access technique. In addition, regarding claim 5, the examiner cited paragraphs [0003], [0005] and [0009] of the admitted prior art as the reference for the particular rejection and provided the following explanation: “consider

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the following scenario: when a dual-mode terminal is in a UMTS cell, it first measures the T\_offset; when it moves to a neighboring GSM cell, it has to secondly active the passive module; when it is in the GSM cell, it then again thirdly measures T\_offset; the steps then repeats; therefore, when the dual-mode terminal repeats second and third steps, the passive module is activated immediately before the measuring the T\_offset again and again.”

In contrast, the newly presented limitations illustrate that “the active radio access module is adapted to activate the passive radio access ... and the activation of the passive radio access module is made immediately before calculating the time offset T\_offset.” Therefore, due to that the newly presented limitations have change the scope of the claimed invention, different rejections are presented in the following paragraphs.

### ***Drawings***

2. The drawings are objected to because the labels for figure 1 elements 14, 16 and 18 do not seem to be consistent with the description of figure 1 in paragraph [0039] lines 5-11. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be

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removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheet" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the corrected drawing and marked-up copy will result in the abandonment of the application.

### ***Claim Objections***

4. The phrase "adapted to" recited in claim 6 (line 12) and claim 7 (line 10) are not positively recited claim limitations. Therefore, the limitations after the phrase are not considered

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the claim limitation. It is suggested that the applicant remove the phrase. However, the reference cited teaches the subject matter following the phrase.

Appropriate correction is required.

### ***Claim Rejection - 35 USC § 103***

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

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3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 3, 4, 6, 7, 8, 9, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the background of Sanchez, U.S. Publication No 20060182147 (admitted prior art) in view of Leprieur et al, U.S. Publication No 20030003951 (Leprieur).

Regarding Claim 1, the admitted prior art teaches that **a method for time-synchronization of at least two radio access modules of a multimode communication mobile terminal which is configured to function according to at least two distinct radio access techniques in a cellular telecommunication network in which one of the radio access modules is active in a**



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**current cell and the other radio access module is in a passive state in the current cell** (see [0003] [0005] [0009] e.g. the type 2 mobile terminal has both GSM mode and UMTS mode electronic cards; when one electronic card (GSM or UMTS) is activated, the other is inactive) **the method comprising steps of: (a) measuring for each of cells adjacent to the current cell** (see [0009] Lines 8-12). However, the admitted prior art does not teach that **the method comprising steps of: (a) measuring for each of cells adjacent to the current cell a time offset  $T_{\text{offset}}$  between start of a specific frame of the first radio technique and start of a specific frame of the second radio access technique; (b) using the time offset  $T_{\text{offset}}$  measured in step (a) for synchronizing the passive radio access module with the active radio access module; and (c) the active radio access module activating the passive radio access module immediately before step (a).** Leprieur from the same field of endeavor teaches that **the method comprising steps of: (a) measuring for each of cells adjacent to the current cell a time offset  $T_{\text{offset}}$**  (see [0005-0007] [0009] [0015] [0040] e.g. for a mobile terminal to make a good transition when moving from a cell with a first mode (GSM or UMTS) to a different cell with a second mode (GSM or UMTS), a mobile terminal connected by a radio link to a base station using a first mode must therefore be in a position to know the exact time for at least one other mode or each of cells with a second mode adjacent to the current cell) **between start of a specific frame of the first radio technique and start of a specific frame of the second radio access technique** (see [0019] [0021] [0033] [000038-0039]); **(b) using the time offset  $T_{\text{offset}}$  measured in step (a) for synchronizing the passive radio access module with the active radio access module** (see Abstract, [0016] [0032] [0045]); **and (c) the active radio access module activating the passive radio access module** (see [0024] [0047]) **immediately before**

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**step (a)** (see [0013] [0020] [0022] [0023-0024] [0033-0035] [0038-0039] [0047] i.e. in order for the multimode terminal to calculate/measure the time shift or time offset, each part, such as a clock, respectively operating in compliance with a mode is used to measure a time value associated with start of the fame of the mode; in addition, paragraph [0047] lines 7-11 states: “when a measurement on a station associated with the second mode is necessary ... the party (part) associated with the first mode can activate the (part associate with) second mode via the microcontroller ...”; so, when a the part of the first mode finishes measuring, the part of first mode activates the part of second mode to start taking measurement associated with the second mode; such step of activation takes place immediately before calculating/measuring the time shift or time offset). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the parts with respect to the GSM and UMTS modes from Leprieuri’s multimode terminal to the GSM and UMTS electronic cards of the type 2 mobile terminal in order to synchronize the two radio access technique using the time offset between the two. The motivation would have been that it is desired to guarantee smooth switching between two different radio access technologies e.g. [0045] line 5-10.

Regarding Claim 3, Leprieur further teaches that **the method, comprising a step of updating a value of the offset T\_offset on each change of the current cell and for each neighboring cell associated with the radio access technique of the passive module** (see [0005-0007] [0009] [0015] [0040] i.e. the UMTS/GSM switching technique and T\_offset calculation must be able to perform repeatedly since it is an cellular communication environment and the states of current cell and its neighboring cells are constantly changing; consider the following scenario: when a

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dual-mode terminal is in a UMTS cell, it first measures the  $T_{\text{offset}}$ ; when it moves to a neighboring GSM cell, it has to secondly active the passive module; when it is in the GSM cell, it then again thirdly measures  $T_{\text{offset}}$ ; the steps then repeats; therefore, when the dual-mode terminal repeats second and third steps, the  $T_{\text{offset}}$  gets updated again and again). At the time of the invention, it would have been obvious to a person ordinary skill in the art to keep updating the  $T_{\text{offset}}$ . The motivation would have been that it is desired to guarantee smooth switching between two different radio access technologies e.g. [0045] line 5-10.

Regarding Claims 4 and 12, the admitted prior art further teaches that **the method, wherein the mobile terminal is a UMTS/GSM dual-mode terminal and wherein the predefined duration  $T_{\text{offset}}$  is a time difference observed on a GSM cell defined in standard 3GPP TS 25.215 (see [0020]).**

Regarding Claim 6, it is a device claim corresponding to the method claim 1, and therefore rejected under the same reason set forth in the same section of claim 1 in this paragraph.

Regarding Claim 7, the admitted prior art teaches that **a multimode mobile terminal comprising: a radio access module dedicated to each operating mode (see [0003] [0009] e.g. the GSM and UMTS electronic cards). However, the admitted prior art does not teach that a clock generator associated with each radio access module; and a unit for calculating a time offset  $T_{\text{offset}}$  between start of a specific frame of a first operating mode and start of a**

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**specific frame of a second operating mode in a cellular telecommunication network, wherein the mobile terminal comprises a central interface which is configured to generate a clock signal of a passive radio access module shifted with respect to a clock signal of an active radio access module concerning the duration  $T_{\text{offset}}$ , and wherein the active radio module is adapted to activate the passive radio access via the central interface, and the activation of the passive radio access module is make immediately before calculating the time offset  $T_{\text{offset}}$ .** Leprieur et al from the same field of endeavor teach that **a clock generator associated with each radio access module** (see [0013] [0022] [0034] e.g. the clocks U1 and U2); **and a unit for calculating a time offset  $T_{\text{offset}}$  between start of a specific frame of a first operating mode and start of a specific frame of a second operating mode in a cellular telecommunication network** (see [0015] [0018-0023] [0025] line 1-10 e.g. the counter), **wherein the mobile terminal comprises a central interface which is configured to generate a clock signal of a passive radio access module shifted with respect to a clock signal of an active radio access module concerning the duration  $T_{\text{offset}}$**  (see [0016] [0025] line 10-12 e.g. the microcontroller), **and wherein the active radio module is adapted to activate the passive radio access via the central interface, and the activation of the passive radio access module is make immediately before calculating the time offset  $T_{\text{offset}}$ .** (see [0013] [0020] [0022] [0023-0024] [0033-0035] [0038-0039] [0047] i.e. in order for the multimode terminal to calculate/measure the time shift or time offset, each part, such as a clock, respectively operating in compliance with a mode is used to measure a time value associated with start of the fame of the mode; in addition, paragraph [0047] lines 7-11 states: “when a measurement on a station associated with the second mode is necessary ... the party (part)

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associated with the first mode can activate the (part associate with) second mode via the microcontroller ...”; so, when a the part of the first mode finishes measuring, the part of first mode activates the part of second mode to start taking measurement associated with the second mode; such step of activation takes place immediately before calculating/measuring the time shift or time offset). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the parts with respect to the GSM and UMTS modes from Leprieuri’s multimode terminal to the GSM and UMTS electronic cards of the type 2 mobile terminal in order to synchronize the two radio access technique using the time offset between the two. The motivation would have been that it is desired to guarantee smooth switching between two different radio access technologies e.g. [0045] line 5-10.

Regarding Claim 8, Leprieur further teaches that **the mobile terminal, wherein the central interface comprises a module for generating an order for activating the passive radio access module** (see [0047] Lines 7-12). At the time of the invention, it would have been obvious to a person ordinary skill in the art to let the central interface comprise a module for generating an order for activating the passive radio access module. The rationale would have been that it is desired simplify the structure of the multimode terminal.

Regarding Claims 9 and 14, the admitted prior art further teaches that **the mobile terminal, wherein the mobile terminal supports a UMTS network and a GSM network** (see [0020]).

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WEI-PO KAO whose telephone number is (571)270-3128. The examiner can normally be reached on Monday through Friday, 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Ricky Ngo/

Supervisory Patent Examiner, Art Unit  
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/Wei-po Kao/

Examiner, Art Unit 2416